

REMARKS

The Office Action dated April 21, 2005, has been received and carefully considered. In this response, claims 1, 4-10, 13-19, 22, 23, and 26 and Figures 1-3 and 6 have been amended. Entry of the amendments to claims 1, 4-10, 13-19, 22, 23, and 26 and Figures 1-3 and 6 is respectfully requested. Reconsideration of the outstanding objections/rejections in the present application is also respectfully requested based on the following remarks.

I. THE OBJECTION TO THE DRAWINGS

On page 2 of the Office Action, the drawings were objected to for failing to match the description in the specification.

Applicants submit herewith replacement drawing sheets for Figures 1-3 and 6 to correct any mismatch between the drawings and the specification. No new matter has been added.

In view of the foregoing, it is respectfully requested that the aforementioned objection to the drawings be withdrawn.

II. THE OBJECTION TO CLAIM 14

On page 2 of the Office Action, claim 14 was objected to for a grammatical error.

Claim 14 has been amended to correct the grammatical error.

In view of the foregoing, it is respectfully requested that the aforementioned objection to claim 14 be withdrawn.

III. THE ENABLEMENT REJECTION OF CLAIMS 4 AND 13

On page 3 of the Office Action, claims 4 and 13 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. This rejection is hereby respectfully traversed.

The Examiner asserts that the specification does not disclose that service nodes and access nodes are included in photonic cross-connect elements as claimed. Applicants respectfully disagree. The specification clearly discloses this at page 7, lines 4-6.

In view of the foregoing, it is respectfully requested that the aforementioned enablement rejection of claims 4 and 13 be withdrawn.

IV. THE ANTICIPATION REJECTION OF CLAIMS 19 AND 21-23

On pages 3-4 of the Office Action, claims 19 and 21-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Zhang et al. ("Signaling Requirements at the Optical UNI", Internet

Draft, July 14, 2000). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id.

Regarding claim 19, the Examiner asserts that Zhang et al. discloses an O-UNI server adaptable for use in a virtual photonics switching system ("UNI-N" disclosed in Section 3 "Introduction") comprising: at least one memory for storing information pertaining to a plurality of network elements

("directory service" disclosed in Section 4 "Optical Network Services"); a communication circuit for receiving a connectivity request from a first registered node for connection with a second registered node; and connection logic for determining compatibility of the first and second nodes; the communications circuit providing instructions to the network elements upon verifying compatibility to search for an end-to-end wavelength path and establish the connection between the first registered node and the second registered node (Section 4 "Optical Network Services" and Section 6.2 "UNI Signaling (Abstract) Messages").

However, Applicants respectfully submit that Zhang et al. fails to disclose, or even suggest, an O-UNI server adaptable for use in a virtual photonics switching system having a plurality of photonics network elements comprising photonics network nodes and photonics network switches comprising: at least one memory for storing information pertaining to each photonics network node registered with the O-UNI server; a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node; and connection logic for determining compatibility of the first and second registered photonics network nodes; the communications circuit providing instructions to photonics network switches upon verifying

compatibility of the first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first registered photonics network node and the second registered photonics network node, as presently claimed. Specifically, Zhang et al. fails to disclose, or even suggest, an O-UNI server having at least one memory for storing information pertaining to each photonics network node registered with the O-UNI server, as presently claimed. The Examiner relies on "UNI-N" disclosed in Section 3 "Introduction" and "directory service" disclosed in Section 4 "Optical Network Services" of Zhang et al. for disclosing this claimed feature. However, "UNI-N" disclosed in Section 3 "Introduction" of Zhang et al. merely refers to a network side entity (i.e., an optical cross-connect) to which a client side entity interfaces. Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server having at least one memory for storing information pertaining to each photonics network node registered with the O-UNI server, as presently claimed. Regarding the Examiner's reliance on "directory service" disclosed in Section 4 "Optical Network Services" of Zhang et al., this term merely describes how clients may learn about the reachability of other remote clients belonging to a same user group. Nowhere in this teaching does Zhang et al.

disclose, or even suggest, an O-UNI server having at least one memory for storing information pertaining to each photonics network node registered with the O-UNI server, as presently claimed. At this point, Applicants would like to remind the Examiner that, as stated in MPEP § 2112, "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Zhang et al. also fails to disclose, or even suggest, an O-UNI server having a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. The Examiner relies on "UNI-N" disclosed in Section 3 "Introduction", Section 4 "Optical Network Services", and Section 6.2 "UNI Signaling (Abstract Messages" of Zhang et al. for disclosing this claimed feature.

However, as discussed above, "UNI-N" disclosed in Section 3 "Introduction" of Zhang et al. merely refers to a network side entity (i.e., an optical cross-connect) to which a client side entity interfaces. Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server having a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. Regarding the Examiner's reliance on Section 4 "Optical Network Services" of Zhang et al., this section merely describes how clients may learn about the reachability of other remote clients belonging to a same user group. Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server having a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. Regarding the Examiner's reliance on Section 6.2 "UNI Signaling (Abstract) Messages" of Zhang et al., this section merely describes how messages are sent between initiating and terminating UNI-C's and a UNI-N (i.e., an optical cross-connect). Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server having a communication circuit for receiving a connectivity request from

a first registered photonics network node for a connection with
a second registered photonics network node, as presently
claimed.

Zhang et al. further fails to disclose, or even suggest, an
O-UNI server having connection logic for determining
compatibility of the first and second registered photonics
network nodes, as presently claimed. The Examiner relies on
"UNI-N" disclosed in Section 3 "Introduction", Section 4
"Optical Network Services", and Section 6.2 "UNI Signaling
(Abstract) Messages" of Zhang et al. for disclosing this claimed
feature. However, as discussed above, "UNI-N" disclosed in
Section 3 "Introduction" of Zhang et al. merely refers to a
network side entity (i.e., an optical cross-connect) to which a
client side entity interfaces. Nowhere in this teaching does
Zhang et al. disclose, or even suggest, an O-UNI server having
connection logic for determining compatibility of the first and
second registered photonics network nodes, as presently claimed.
Regarding the Examiner's reliance on Section 4 "Optical Network
Services" of Zhang et al., this section merely describes how
clients may learn about the reachability of other remote clients
belonging to a same user group. Nowhere in this teaching does
Zhang et al. disclose, or even suggest, an O-UNI server having
connection logic for determining compatibility of the first and

second registered photonics network nodes, as presently claimed.

Regarding the Examiner's reliance on Section 6.2 "UNI Signaling (Abstract) Messages" of Zhang et al., this section merely describes how messages are sent between initiating and terminating UNI-C's and a UNI-N (i.e., an optical cross-connect). Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server having connection logic for determining compatibility of the first and second registered photonics network nodes, as presently claimed.

Thus, it is respectfully submitted that Zhang et al. does not teach, or even suggest, the presently claimed invention. Accordingly, it is respectfully submitted that claim 19 should be allowable.

Claims 21-23 are dependent upon independent claim 19. Thus, since independent claim 19 should be allowable as discussed above, claims 21-23 should also be allowable at least by virtue of their dependency on independent claim 19. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination. For example, claim 21 recites that the connection logic determines technology compatibility. It is respectfully submitted that Zhang et al. does not teach, or even suggest, this claimed feature.

Accordingly, it is respectfully submitted that claim 21 should be allowable. Also, claim 22 recites that the O-UNI server further comprises fault management tools for determining when an error has occurred in establishing the connection. It is respectfully submitted that Zhang et al. does not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 22 should be allowable. Further, claim 23 recites that the O-UNI server further comprises registration tools for registering photonics network nodes and collecting information including number of ports, wavelengths per port, and bandwidth per wavelength. It is respectfully submitted that Zhang et al. does not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 23 should be allowable.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 19 and 21-23 be withdrawn.

V. THE OBVIOUSNESS REJECTION OF CLAIMS 1-18

On pages 5-10 of the Office Action, claims 1-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Metz ("IP Over Optical: From Packets to Photons", IEEE Internet Computing, November-December 2000) in view of Zhang et al.

("Signaling Requirements at the Optical UNI", Internet Draft, July 14, 2000). This rejection is hereby respectfully traversed with amendment.

As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Also, as stated in MPEP § 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The mere fact that references can be combined or

modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Further, as stated in MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). Additionally, as stated in MPEP § 2141.02, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Finally, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Regarding claim 1, the Examiner asserts that Metz discloses a virtual photonics switching system comprising: multiple photonics cross-connect network elements; optical fibers connecting the network elements (Overlay Model in Figure 2; "Routing at the Optical Layer" section on page 78;

"Architectural Models" section on page 79); and an O-UNI server including: at least one memory for storing information pertaining to the network elements; and a communication circuit for receiving a connectivity request from a first registered node for connection with a second registered node ("Routing at the Optical Layer" section on page 78; "Architectural Models" section on page 79; "Optical UNI" section on page 80). The Examiner acknowledges that Metz fails to disclose connection logic for determining compatibility of the first and second nodes and the communications circuit providing instructions to the network elements upon verifying compatibility to search for an end-to-end wavelength path and establish the connection between the first registered node and the second registered node. However, the Examiner then asserts that Zhang et al. discloses connection logic for determining compatibility of the first and second nodes and the communications circuit providing instructions to the network elements upon verifying compatibility to search for an end-to-end wavelength path and establish the connection between the first registered node and the second registered node (Section 3 "Introduction"; Section 4 "Optical Network Services"; Section 6.2 "UNI Signaling (Abstract) Messages"). The Examiner then goes on to assert that it would have been obvious to combine the teachings of Zhang et

al. with the teachings of Metz so as to arrive at the claimed invention.

However, the Applicants respectfully submit that Metz fails to disclose, or even suggest, a virtual photonics switching system comprising: multiple photonics network elements comprising photonics network nodes and photonics network switches; optical fibers connecting the photonics network elements; and an O-UNI server optically connected to at least one of the photonics network elements including: at least one memory for storing information pertaining to photonics network nodes registered with the O-UNI server; and a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. Specifically, Metz fails to disclose, or even suggest, an O-UNI server optically connected to at least one of the photonics network elements including: at least one memory for storing information pertaining to photonics network nodes registered with the O-UNI server; and a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. The Examiner relies on the "Routing at the Optical Layer" section on page 78 of Metz, the

"Architectural Models" section on page 79 of Metz, and the "Optical UNI" section on page 80 of Metz for disclosing this claimed feature. However, the "Routing at the Optical Layer" section on page 78 of Metz merely describes how an optical cross-connect (OXC) switches optical signals across a switch fabric. Nowhere in this teaching does Metz disclose, or even suggest, a server, let alone an O-UNI server optically connected to at least one of the photonics network elements including: at least one memory for storing information pertaining to photonics network nodes registered with the O-UNI server; and a communication circuit for receiving a connectivity request from a first registered photonics network node for a connection with a second registered photonics network node, as presently claimed. Regarding the Examiner's reliance on the "Architectural Models" section on page 79 of Metz, this section merely describes overlay and peer architectural models for optical networks. Nowhere in this teaching does Metz disclose, or even suggest, a server, let alone an O-UNI server optically connected to at least one of the photonics network elements including: at least one memory for storing information pertaining to photonics network nodes registered with the O-UNI server; and a communication circuit for receiving a connectivity request from a first registered photonics network node for a

connection with a second registered photonics network node, as
presently claimed. Regarding the Examiner's reliance on the
"Optical UNI" section on page 80 of Metz, this section merely
describes optical user-to-network interface for communicating
between optical clients and adjacent optical cross-connect (OXC)
switches. Nowhere in this teaching does Metz disclose, or even
suggest, a server, let alone an O-UNI server optically connected
to at least one of the photonics network elements including: at
least one memory for storing information pertaining to photonics
network nodes registered with the O-UNI server; and a
communication circuit for receiving a connectivity request from
a first registered photonics network node for a connection with
a second registered photonics network node, as presently
claimed. At this point, Applicants would like to remind the
Examiner that, as stated in MPEP § 2112, "In relying upon the
theory of inherency, the examiner must provide a basis in fact
and/or technical reasoning to reasonably support the
determination that the allegedly inherent characteristic
necessarily flows from the teachings of the applied prior art."
Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter.
1990) (emphasis in original). The fact that a certain result or
characteristic may occur or be present in the prior art is not
sufficient to establish the inherency of that result or

characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Applicants also respectfully submit that Zhang et al. fails to disclose, or even suggest, an O-UNI server including: connection logic for determining compatibility of the first and second registered photonics network nodes, and the communications circuit providing instructions to photonics network switches upon verifying compatibility of the first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first registered photonics network node and the second registered photonic network node, as presently claimed. The Examiner relies on "UNI-N" disclosed in Section 3 "Introduction", Section 4 "Optical Network Services", and Section 6.2 "UNI Signaling (Abstract) Messages" of Zhang et al. for disclosing this claimed feature. However, as discussed above with respect to claim 19, "UNI-N" disclosed in Section 3 "Introduction" of Zhang et al. merely refers to a network side entity (i.e., an optical cross-connect) to which a client side entity interfaces. Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server including: connection logic for determining compatibility of the first and second registered photonics network nodes, and the communications

circuit providing instructions to photonics network switches upon verifying compatibility of the first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first registered photonics network node and the second registered photonic network node, as presently claimed. Regarding the Examiner's reliance on Section 4 "Optical Network Services" of Zhang et al., as discussed above with respect to claim 19, this section merely describes how clients may learn about the reachability of other remote clients belonging to a same user group. Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server including: connection logic for determining compatibility of the first and second registered photonics network nodes, and the communications circuit providing instructions to photonics network switches upon verifying compatibility of the first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first registered photonics network node and the second registered photonic network node, as presently claimed. Regarding the Examiner's reliance on Section 6.2 "UNI Signaling (Abstract) Messages" of Zhang et al., as discussed above with respect to claim 19, this section merely describes how messages are sent between initiating and

terminating UNI-C's and a UNI-N (i.e., an optical cross-connect). Nowhere in this teaching does Zhang et al. disclose, or even suggest, an O-UNI server including: connection logic for determining compatibility of the first and second registered photonics network nodes, and the communications circuit providing instructions to photonics network switches upon verifying compatibility of the first and second registered photonics network nodes to search for an end-to-end wavelength path and establish the connection between the first registered photonics network node and the second registered photonic network node, as presently claimed.

Thus, it is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, the presently claimed invention. Accordingly, it is respectfully submitted that claim 1 should be allowable.

Claims 2-9 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 2-9 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination. For example, claim 2 recites that the O-UNI server further comprises a web menu for providing a user with a

selection of available services. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 2 should be allowable. Also, claim 3 recites that the connection logic determines technology compatibility. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 3 should be allowable. Also, claim 4 recites that the photonics network nodes include photonics network service nodes and photonics network access nodes. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 4 should be allowable. Also, claim 5 recites that the photonics network service nodes comprise core routers or video servers. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 5 should be allowable. Also, claim 6 recites that the photonics network access nodes comprise multiplexers or edge routers. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not

teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 6 should be allowable. Also, claim 7 recites that the O-UNI server further comprises fault management tools for determining when an error has occurred in establishing the connection. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 7 should be allowable. Also, claim 8 recites that the photonics network elements, the optical fibers, and the O-UNI server comprise a protocol agnostic private network, provided that communicating photonics network nodes use an identical communication protocol. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 8 should be allowable. Also, claim 9 recites that the O-UNI server further comprises registration tools for registering photonics network nodes and collecting information including number of ports, wavelengths per port, and bandwidth per wavelength. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed

feature. Accordingly, it is respectfully submitted that claim 9 should be allowable.

Regarding claims 10-18, these claims should also be allowable for the reasons set forth above with respect to claims 1-9.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 1-18 be withdrawn.

VI. THE OBVIOUSNESS REJECTION OF CLAIMS 20 AND 25

On pages 10-11 of the Office Action, claims 20 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhang et al. ("Signaling Requirements at the Optical UNI", Internet Draft, July 14, 2000) in view of Metz ("IP Over Optical: From Packets to Photons", IEEE Internet Computing, November-December 2000). This rejection is hereby respectfully traversed.

Claims 20 and 25 are dependent upon independent claim 19. Thus, since independent claim 19 should be allowable as discussed above, claims 20 and 25 should also be allowable at least by virtue of their dependency on independent claim 19. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references

taken either alone or in combination. For example, claim 20 recites that the O-UNI server further comprises a web menu for providing a user with a selection of available services. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 20 should be allowable. Also, claim 25 recites that the O-UNI server further comprises accounting management tools for managing data associated with service usage. It is respectfully submitted that Metz and Zhang et al., either alone or in combination, do not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 25 should be allowable.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 20 and 25 be withdrawn.

VII. THE OBVIOUSNESS REJECTION OF CLAIM 26

On page 11 of the Office Action, claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhang et al. ("Signaling Requirements at the Optical UNI", Internet Draft, July 14, 2000). This rejection is hereby respectfully traversed.

Claim 26 is dependent upon independent claim 19. Thus, since independent claim 19 should be allowable as discussed above, claim 26 should also be allowable at least by virtue of their dependency on independent claim 19. Moreover, this claim recites additional features which are not claimed, disclosed, or even suggested by the cited reference. For example, claim 26 recites that the O-UNI server further comprises security management tools for managing allocation and authentication of access passwords of the photonics network nodes. It is respectfully submitted that Zhang et al. does not teach, or even suggest, this claimed feature. Accordingly, it is respectfully submitted that claim 26 should be allowable.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claim 26 be withdrawn.

VIII. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the

present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

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